

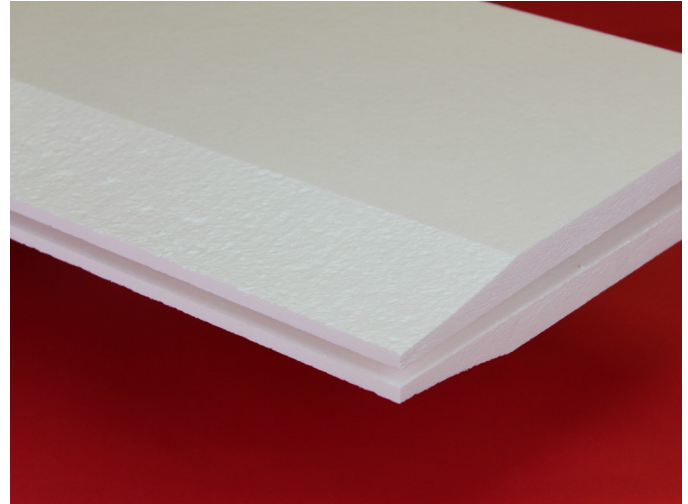


Castertip Type ASQ

General Information

ZIRCAR Ceramics' Castertip Type ASQ is rigid low-mass combination of washed alumina-silica fibers and a high-purity inorganic alumina binder. Initially designed for use as a castertip on SCAL thin-strip casters, ASQ exhibits uniform low density and low thermal conductivity. ASQ exhibits good hot strength and resiliency making it virtually immune to thermal shock and changes in molten aluminum head pressure. As a castertip ASQ requires no BN coating and is used in the production of "pinhole-free" aluminum sheet all around the world.

ASQ is pre-fired, contains no organic binders and will produce no smoke or odors when heated. ASQ shows excellent resistance to chemical attack and is not affected by oil or water. It is, however, affected by hydrofluoric acid, phosphoric acid and strong alkalis.



Characteristics & Properties

Typical Composition, %	
Al ₂ O ₃	58
SiO ₂	42
Maximum Use Temp.*, °C (°F)	1260 (2300)
Bulk Density, g/cc (pcf)	0.19-0.26 (12-16)
Binder	Alumina
Compressive Strength** @ 10% compression, MPa (psi) as received	0.11 (16)
after 24 hrs at 760°C (1400°F)	0.12 (17)
Flexural Strength**, MPa (psi) as received	0.46 (66)
after 24 hrs at 760°C (1400°F)	0.50 (73)
after 24 hrs at 1000°C (1832°F)	0.48 (70)
Loss On Ignition, % after 24 hrs at 760°C (1400°F)	3
Loss On Drying, % after 24 hrs at 121°C (250°F)	2
Linear Shrinkage‡, %	
after 24 hrs at 760°C (1400°F)	2
after 24 hrs at 1000°C (1832°F)	2
after 24 hrs at 1100°C (2012°F)	3
after 24 hrs at 1200°C (2192°F)	5

ZIRCAR Ceramics, Inc.

PO Box 519
100 N. Main St., Florida, NY 10921-0519
Telephone: (845) 651-6600
E-mail: sales@zircarceramics.com

Technical Data Bulletin
Castertip Type ASQ
www.zircarceramics.com
Page 1 of 2

Castertip Type ASQ

Characteristics & Properties Continued

Thermal Conductivity**, W/m K (BTU/ft ² °F/in)	
600°C (1112°F)	0.11 (.70)
800°C (1472°F)	0.16 (1.20)
1100°C (2012°F)	0.27 (1.70)

The data presented herein is intended to help the user to determine the appropriateness of this material for their application.

This data is a nominal representation of this product's properties and characteristics and therefore should not be used in preparing specifications.

*Maximum use temperature is dependent on variables such as stresses, both thermal and mechanical, and the chemical environment that the material experiences. ** Properties expressed parallel to thickness. ‡ Properties expressed perpendicular to thickness.

Suggested Applications

Castertips for continuous casting of aluminum strip.

Availability

ASQ is manufactured on a custom basis in flat sheets in a number of sizes ranging from 24"W x 36"L x 1"T up to 24"W x 78"L x 2"T (610mm x 1982mm x 50mm).

Custom shapes: our state-of-the-art tight-tolerance machining techniques allow a wide variety of sizes and shapes to be made.

Surface treatments including rigidization with colloidal alumina (AL-R/H) or colloidal silica (SI-RIG) or coating with Boron Nitride or alumina cement (AL-CEM) are all available.

To Order

Contact ZIRCAR Ceramics, provide drawings describing castertip requirements and we will provide an offer.

Custom Castertip Assemblies: our extensive experience, combined with world-class craftsmanship building injector nozzles and castertip assemblies, helps caster operators control their tip shop costs.



ZIRCAR Ceramics, Inc.

PO Box 519

100 N. Main St., Florida, NY 10921-0519

Telephone: (845) 651-6600

E-mail: sales@zircarceramics.com

www.zircarceramics.com

Revision Date Dec. 26, 2016